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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Shinya HASEGAWA, et al.

Application No.: 10/509,491

Filed: September 29, 2004

Customer Number: 20277

Confirmation Number: 5359

Group Art Unit: 1731

Examiner: Not yet assigned

For: BISMUTH GLASS COMPOSITION, AND MAGNETIC HEAD AND PLASMA DISPLAY  
PANEL USING THE SAME AS SEALING MEMBER

REQUEST FOR CORRECTED FILING RECEIPT

Mail Stop Official Filing Receipt  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Attached is a copy of the Filing Receipt received from the U.S. Patent and Trademark Office in the above-referenced application. It is noted that the numbers of total and independent claims are incorrect. Attached is a copy of the preliminary amendment and a copy of the claims as amended on September 29, 2004, which evidences **the total number of claims should be twenty-four (24), and the number of independent claims should be one (1).** It is requested that a corrected filing receipt be issued.

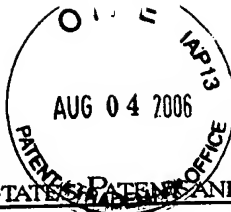
Respectfully submitted,

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Date: August 4, 2006

Please recognize our Customer No. 20277  
as our correspondence address.

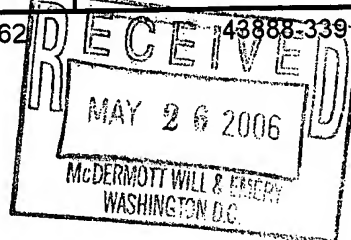


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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/509,491	09/29/2004	1731	1462	43888-339	6	26 24	2 1

20277  
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WASHINGTON, DC 20005-3096



CONFIRMATION NO. 5359

REPLACEMENT FILING RECEIPT



\*OC000000018920635\*

Date Mailed: 05/23/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

**Applicant(s)**

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**Assignment For Published Patent Application**

Matsushita Electric Industrial Co., Ltd, Osaka, JAPAN

**Power of Attorney:** The patent practitioners associated with Customer Number 20277.

**Domestic Priority data as claimed by applicant**

This application is a 371 of PCT/JP03/04043 03/28/2003

**Foreign Applications**

JAPAN 2002-96453 03/29/2002  
JAPAN 2002-115831 04/18/2002  
JAPAN 2002-358616 12/10/2002

If Required, Foreign Filing License Granted: 03/24/2006

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/509,491**

**Projected Publication Date:** Not Applicable

**Non-Publication Request:** No

**Early Publication Request:** No

**Title**

Bismuth glass composition, and magnetic head and plasma display panel including the same as sealing member

**Preliminary Class**

065

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Docket No.: 43888-339

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of	:	Customer No.: 20277
Shinya HASEGAWA, et al.	:	Confirmation No.: Not yet assigned
Application No.: Not yet assigned	:	Group Art Unit: Not yet assigned
Filed: September 29, 2004	:	Examiner: Not yet assigned
For: BISMUTH GLASS COMPOSITION, AND MAGNETIC HEAD AND PLASMA DISPLAY PANEL USING THE SAME AS SEALING MEMBER	:	

**PRELIMINARY AMENDMENT**

Mail Stop NEW APPLICATIONS  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Prior to examination of the above-referenced application, please amend the application as follows:

**Amendments to the Claims** begin on page 2 of this paper.

**Remarks/Arguments** begin on page 6 of this paper.

## **IN THE CLAIMS**

*This listing of claims will replace all prior versions and listings of claims in the application.*

### **Listing of Claims:**

1. (Currently Amended) A Bismuth glass composition comprising 0.5 to 14 wt% of SiO<sub>2</sub>, 3 to 15 wt% of B<sub>2</sub>O<sub>3</sub>, 4 to 22 wt% of ZnO, 55 to 90 wt% of Bi<sub>2</sub>O<sub>3</sub> and 4 wt% or less of Al<sub>2</sub>O<sub>3</sub>, and

further comprising 5 wt% or less of an oxide of Group A, 12 wt% or less of an oxide of Group B and 0.1 to 10 wt% of an oxide of Group C, wherein

the oxide of Group A is at least one selected from the group consisting of Li<sub>2</sub>O, Na<sub>2</sub>O and K<sub>2</sub>O,

the oxide of Group B is at least one selected from the group consisting of MgO, CaO, SrO and BaO, and

the oxide of Group C is at least one selected from the group consisting of Sc<sub>2</sub>O<sub>3</sub>, Y<sub>2</sub>O<sub>3</sub>, La<sub>2</sub>O<sub>3</sub>, CeO<sub>2</sub>, Pr<sub>2</sub>O<sub>3</sub>, Nd<sub>2</sub>O<sub>3</sub>, Sm<sub>2</sub>O<sub>3</sub>, Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Tb<sub>2</sub>O<sub>3</sub>, Dy<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, Er<sub>2</sub>O<sub>3</sub>, Tm<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>O<sub>3</sub> and Lu<sub>2</sub>O<sub>3</sub>[[.]], and

the weight ratio of Al<sub>2</sub>O<sub>3</sub> to SiO<sub>2</sub> is 0.5 or less.

2. (Original) The bismuth glass composition in accordance with claim 1 comprising 0.5 to 12 wt% of SiO<sub>2</sub>, 3 to 9 wt% of B<sub>2</sub>O<sub>3</sub>, 4 to 19 wt% of ZnO, 55 to 85 wt% of Bi<sub>2</sub>O<sub>3</sub> and 0.1 to 4 wt% of Al<sub>2</sub>O<sub>3</sub>.

3. (Original) The bismuth glass composition in accordance with claim 1 comprising 1.7 to 12 wt% of SiO<sub>2</sub>, 3 to 9 wt% of B<sub>2</sub>O<sub>3</sub>, 9.5 to 19 wt% of ZnO, 62 to 80 wt% of Bi<sub>2</sub>O<sub>3</sub> and 0.1 to 4 wt% of Al<sub>2</sub>O<sub>3</sub>.

4. (Original) The bismuth glass composition in accordance with claim 1 comprising 1.1 to 4.5 wt% of SiO<sub>2</sub>, 4 to 9 wt% of B<sub>2</sub>O<sub>3</sub>, 9.5 to 18 wt% of ZnO and 72 to 85 wt% of Bi<sub>2</sub>O<sub>3</sub>.

5. (Original) The bismuth glass composition in accordance with any one of claims 1 to 4 comprising 4 wt% or less of the oxide of Group A.

6. (Original) The bismuth glass composition in accordance with claim 5, wherein the oxide of Group A comprises 2 wt% or less of  $\text{Li}_2\text{O}$ , 3 wt% or less of  $\text{Na}_2\text{O}$  and 4 wt% or less of  $\text{K}_2\text{O}$ .

7. (Original) The bismuth glass composition in accordance with any one of claims 1 to 3 and 5 to 6 comprising 10 wt% or less of the oxide of Group B.

8. (Original) The bismuth glass composition in accordance with claim 7, wherein the oxide of Group B comprises 5 wt% or less of  $\text{MgO}$ , 6 wt% or less of  $\text{CaO}$ , 8 wt% or less of  $\text{SrO}$  and 10 wt% or less of  $\text{BaO}$ .

9. (Original) The bismuth glass composition in accordance with any one of claims 1 to 8 comprising 0.1 to 5 wt% of the oxide of Group C.

10. (Original) The bismuth glass composition in accordance with claim 4 or 5 comprising 0.1 to 2 wt% of  $\text{Al}_2\text{O}_3$ .

11. (Original) The bismuth glass composition in accordance with 4, 5 or 10 comprising 8 wt% or less of the oxide of Group B.

12. (Original) The bismuth glass composition in accordance with claim 11, wherein the oxide of Group B comprises 2 wt% or less of  $\text{MgO}$ , 0.1 to 4.5 wt% of  $\text{CaO}$ , 0.1 to 4.5 wt% of  $\text{SrO}$  and 4 wt% or less of  $\text{BaO}$ .

13. (Original) The bismuth glass composition in accordance with any one of claims 1 to 3 and 5 to 9, wherein the weight ratio of  $\text{ZnO}$  to  $\text{B}_2\text{O}_3$  is 0.8 to 2.8.

14. (Cancelled)

15. (Currently Amended) The bismuth glass composition in accordance with any one of claims 4 to 5[[,]] and 10 to 12 [[and 14]], wherein the weight ratio of ZnO to B<sub>2</sub>O<sub>3</sub> is 1.1 to 2.5.

16. (Currently Amended) A sealing member for a magnetic head comprising the bismuth glass composition in accordance with any one of claims 1 to 3, 5 to 9 and 13 [[to 14]].

17. (Currently Amended) A sealing member for a plasma display panel comprising the bismuth glass composition in accordance with any one of claims 4 to 5, 10 to 12 and [[14 to]] 15.

18. (Original) The sealing member for a plasma display panel in accordance with claim 17 further comprising a low-expansion ceramic filler in a weight ratio of 0.01 to 4 with respect to the bismuth glass composition.

19. (Original) The sealing member for a plasma display panel in accordance with claim 18, wherein the low-expansion ceramic filler is at least one selected from the group consisting of cordierite, willemite, forsterite, anorthite, zircon, mullite,  $\beta$ -eucryptite,  $\beta$ -spodumene, cristobalite, barium titanate, titanium oxide, tin oxide, aluminum oxide, zirconium oxide and quartz glass.

20. (Original) A magnetic head comprising a pair of magnetic core halves, at least one of which being provided with a coil groove, a magnetic gap member interposed between surfaces of the magnetic core halves facing to a magnetic gap, and the sealing member in accordance with claim 16 for bonding the pair of magnetic core halves.

21. (Original) The magnetic head in accordance with claim 20 further comprising a magnetic metal film on at least one of the surfaces facing to the magnetic gap.



22. (Original) The magnetic head in accordance with claim 20, wherein each of the paired magnetic core halves comprises a pair of nonmagnetic substrates and a magnetic metal film sandwiched between the nonmagnetic substrates.

23. (Original) A magnetic recording/reproducing device comprising the magnetic head in accordance with any one of claims 20 to 22 to perform recording and reproducing information to and from a magnetic information recording medium.

24. (Original) A plasma display panel comprising a front plate and a rear plate facing to each other, display electrodes and address electrodes arranged between the front plate and the rear plate, barrier ribs for isolating the address electrodes, dielectric layers covering the surfaces of the display electrodes and the address electrodes, respectively, and the sealing member in accordance with any one of claims 17 to 19 for bonding the peripheries of the front plate and the rear plate.

25. (Original) The plasma display panel in accordance with claim 24 provided with an air hole formed in the front plate or the rear plate, further comprising a glass tube communicating with the air hole, wherein an opening end of the air hole and an end of the glass tube are bonded with the sealing member.

**REMARKS**

Applicants have amended claims 1 and 15 – 17. Please cancel claim 14 without prejudice or disclaimer.

No new matter has been introduced. Entry of the amendment is respectfully solicited.

Respectfully submitted,

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